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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,780	02/04/2004	Anthony DiMaio	0095-UP-DIV-1	5178

7590 06/20/2005

CROMPTON CORPORATION  
199 Benson Road  
Middlebury, CT 06749

EXAMINER
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LEE, RIP A

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/771,780	<b>Applicant(s)</b> DIMAIO ET AL.	
	<b>Examiner</b> Rip A. Lee	<b>Art Unit</b> 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on April 27, 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.  
4a) Of the above claim(s) 1-15 and 17-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-20 is/are rejected.
- 7) ☒ Claim(s) 21 and 22 is/are objected to.
- 8) ☒ Claim(s) 1-29 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

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|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of Group II, claims 16-22, drawn to a lubricant composition, in the reply filed on April 27, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). The requirement is still deemed proper and is therefore made FINAL.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Okamoto et al. (U.S. 5,629,398).

Okamoto *et al.* teaches cyclic olefin copolymers derived from a cyclic olefin and at least one alpha-olefin (see general disclosure, abstract, claim 7). The copolymer is used in a composition comprising lubricant (claim 16). In the general sense, this qualifies as "lubricant composition, and therefore, the subject matter of the parent claim is anticipated by fully by the prior art. Regarding the product by process limitation in claims 16, 17 and 20, it is well settled that where product by process claims are rejected over a prior art product that appears to be the same, the burden is shifted to the Applicant to establish an unobviousness difference, even if the production processes are different.<sup>1</sup> Furthermore, the patentability of a product claim rests on the product formed, not on the method by which it was produced.<sup>2</sup>

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<sup>1</sup> *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983).

<sup>2</sup> *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

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Despite this, one gleans from the disclosure that the copolymers are prepared from metallocene based catalyst systems such as those derived from  $\text{Me}_2\text{C}(\text{Cp})(\text{Flu})\text{ZrCl}_2$  and  $\text{Ph}_2\text{C}(\text{Cp})(\text{Flu})\text{ZrMe}_2$  (column 7). The copolymer molecular weight is controlled readily by polymerization in the presence of hydrogen (col. 13, line 35). Ethylene/norbornene copolymers are exemplified, however, other alpha olefins may be used to make copolymers. These include 1-decene (col. 13, line 62).

4. Claims 16-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Datta *et al.* (U.S. 5,981,643).

Datta *et al.* discloses a method of lowering the glass transition temperature  $T_g$  of ethylene/cyclic olefin (*i.e.*, norbornene) copolymers to less than  $-40^\circ\text{C}$  by combining with process oils (claim 1). The resulting combination more than qualifies as “lubricant composition.” Regarding the product by process limitation in claims 16, 17 and 20, it is well settled that the patentability of a product claim rests on the product formed, not on the method by which it was produced.<sup>2</sup>

#### ***Allowable Subject Matter***

5. Claims 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims are describe the characteristics of certain embodiments of the present invention. In particular, the claims impose an upper limit of  $-20^\circ\text{C}$  on the glass transition temperature and an upper limit of 80,000 on the weight average molecular weight. The copolymer is also substantially amorphous. None of the cited references discloses all the features recited in claims 21 and 22.

Art Unit: 1713

***Information Disclosure Statement***

6. The information disclosure statement filed February 4, 2004 fails to comply with 37 CFR 1.98(a)(1), which requires the application number of the application in which the information disclosure statement is being submitted on each page of the list. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered. Applicants may not submit signed information disclosure statements from the parent case as the IDS for the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

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June 14, 2005



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